

BACKGROUND PAPER:
A COMPREHENSIVE NUCLEAR TEST BAN

The Soviet Moratorium

On July 29, 1985, the Soviet Union announced that, beginning August 6, it would cease nuclear testing until at least the end of the year, after which time the moratorium would continue ^{only} if the United States were to join in. (1)

This unilateral moratorium by the Soviets is among the most significant arms control developments in 20 years. If entered into by the United States as well, the de facto ban on superpower testing would provide insurance against reciprocal fears of major technological breakthroughs that serve to undermine disarmament efforts in Geneva. (2) In addition, a ban on nuclear testing would fulfill the legal obligations that both superpowers assumed under the Limited Test Ban Treaty of 1963, in which the U.S. and U.S.S.R. pledged to seek "discontinuance of all test explosions of nuclear weapons for all time." (3)

W. Averell Harriman, who successfully negotiated final terms of the Limited Test Ban for President Kennedy, has recently written that "it is a great challenge of statesmanship to be able to perceive genuine opportunities for mutually advantageous arms control agreements at the moments, often fleeting, when such opportunities arise." (4) Such a moment has arrived; it is essential that the opportunity not be lost.

Threshold vs. Test Ban

Reagan Administration officials rejected the Soviet offer on the very day it was publicly announced; they offered instead a counterproposal for the Soviets to send observers to the next U.S. underground nuclear test. (5) The purpose of this counterproposal is to strengthen confidence in verifying that nuclear explosions do not exceed the 150 kiloton threshold agreed to in the 1974 Threshold Test Ban Treaty (never ratified by the U.S. Senate). The Soviets, apparently now willing to observe their legal obligation to "end nuclear tests for all time," rejected the U.S. proposal, calling it an attempt to "register nuclear blasts and thus to legalize them." (6)

Verification

One of the arguments employed by U.S. officials in rejecting the Soviet offer is that such a halt to nuclear testing is unverifiable. Such an objection may have been arguably valid in 1963 when similar concerns helped to thwart President Kennedy's original intention of achieving a comprehensive test ban. Significant improvements in seismic instruments in the intervening 22 years, however, now lead scientists to believe

that a total test ban could be monitored with great confidence. (7) Indeed, new detection techniques appear capable of unambiguously detecting nuclear explosions as small as one kiloton--a level of explosive force considerably lower than the smallest Soviet nuclear warhead. (8) A total test ban, moreover, is much easier to verify than specified yield limitations of the Threshold Test Ban.

The "Testing Gap"

It is likewise illegitimate for U.S. officials to reject a total test ban because of purported Soviet short or long range advantages in testing. As of January 1, 1985, the Soviets had conducted a total of 564 nuclear tests, an enormous number, to be sure, but significantly less than the U.S. total of 765 nuclear tests. In the last several years both sides have averaged between 20 and 24 tests annually. In 1985 the Soviets have conducted between four and eight tests, depending on whether U.S. or Swedish authorities respectively are relied upon for data. On August 17, eleven days after the Soviets officially ceased testing, the U.S. conducted its tenth nuclear explosion of the year. (9)

Prior Moratoriums

The U.S. Secretary of State has also attacked the sincerity of the current Soviet policy change by claiming that the Soviets broke a similar moratorium in 1961. (10) Of course it is dubious at best to believe that Soviet policy under Mikhail Gorbachev will exactly follow the precedents of Soviet policy established by Nikita Khrushchev. The central point, however, is that it was President Eisenhower, and not Premier Khrushchev who, on December 29 1959, formally announced that the U.S. no longer considered itself bound by the moratorium. After three days the Soviet Union also renounced the moratorium, but said it would not test unless the "Western powers" did so first. Three months later France began a series of tests, and Soviet testing resumed some 18 months after that.

There was, then, no legal prohibition against nuclear testing and no gentleman's agreement to refrain from testing for the Soviets to break. Similarly there was no surprise resumption of testing, as administration officials also allege, which permitted the Soviets to gain a testing advantage. Indeed from the resumption of nuclear testing in 1961 to the atmospheric ban on testing in August 1963, the U.S. tested 137 nuclear devices to the Soviet 71.

Nuclear Superiority

All of these unsupported rationalizations for refusing to join the Soviet testing moratorium lead to the conclusion that top U.S. military and civilian officials view a test

ban as inimical to their nuclear development program now designed to achieve nuclear superiority. Indeed administration officials have stated their belief that continued nuclear testing is needed to find ways to fight and win a long or "protracted" nuclear war, with integrated offensive and "defensive" weapons. (11)

Nuclear War and Stemming Proliferation

Several weapons systems considered for deployment in coming years, such as the American MX and Trident D-5 missiles and the nuclear-pumped X-ray laser weapon, require continued testing in order to become fully operational. (12) However, these weapons add nothing to deterrence based on retaliation, but instead increase the likelihood of a pre-emptive first strike. It is therefore vital for U.S. national security that these weapons and future Soviet counterparts are not fully developed in the superpower arsenals. A comprehensive nuclear test ban, by dramatically constraining the rate at which destabilizing weapons are developed, would increase U.S. national security by decreasing the likelihood of nuclear war. (13)

In addition, August 1985 marks the beginning of the third and likely most in depth review of the Non-Proliferation Treaty of 1968. (14) Non-nuclear signatories have been pointing to the marked failure of the nuclear weapons-states, especially the U.S. and the U.S.S.R. to "pursue...measures relating to the cessation of the nuclear arms race at an early date and to nuclear disarmament"(Article VI). The treaty also specifically points to a ban on "all test explosions of nuclear weapons for all time" as a principal measure. (15) Failure to join the Soviet moratorium may be plausibly pointed to as evidence that the U.S. fails to take seriously its legal obligations to help stem the proliferation of nuclear weapons. NPT signatories who consider their own pledge not to develop nuclear weapons as being conditioned on good faith efforts on the part of the nuclear states, may then feel free to develop their own nuclear arsenals.

A Real Opportunity or Mere Propaganda?

Forty years of Cold War politics have left both superpowers understandably suspicious of new initiatives, especially those which come at politically sensitive times like the current "pre-summit" period. However, to regard all policy initiatives as exclusively propaganda is to condemn our nations to an increasingly dangerous arms race without any hope for progress toward peace.

The only way to know whether the Soviets, in their offer to ban nuclear tests, are sincere in their desire to halt the nuclear arms race, is to join the moratorium on testing and work to complete a treaty making such a prohibition on testing the law.

notes

1. "Moscow Is Suspending Atom Tests Till Dec. 31," New York Times, 30 July 1985.
2. Eugene J. Carroll, "A Useful Nuclear Step by Moscow," New York Times, 7 August 1985.
3. Limited Test Ban Treaty of 1963.
4. Forward to Glenn T. Seaborg, Kennedy, Khrushchev and the Test Ban, (Berkeley: Univ. of Calif. Press, 1981).
5. "U.S. and Russians Make New Offers On Nuclear Tests," New York Times, 30 July 1985.
6. Ibid.
7. Lynn Sykes and Jack Evernden, "The Verification of a Comprehensive Nuclear Test Ban," Scientific American, October 1982.
8. Hafemoister et al., "The Verification of Compliance with Arms Control Agreements," Scientific American, March 1985.
9. "Soviet Must Shift on Major Issues, M'Farlane Insists," New York Times, 20 August 1985.
10. Op Cit note 5.
11. "U.S. Officials Say 2 Key Projects Require More Atomic Tests," New York Times, 30 July 1985.
12. Ibid.
13. See "Simultaneous Test Ban," The Defense Monitor, V 14, #5, 1985.
14. William Epstein, "A Critical Time for Nonproliferation," Scientific American, August 1985.
15. Preamble to the Treaty.

Prepared by:

Daniel Galpern--Coordinator
Chico Peace Center
930 Walnut St.
Chico, Ca., 95928
(916) 893-9078